

CLASSIFICATION CONFIDENTIAL  
 SECURITY INFORMATION  
 CENTRAL INTELLIGENCE AGENCY  
 INFORMATION FROM  
 FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

50X1-HUM

COUNTRY USSR  
 SUBJECT Economic; Technological - Machine tools, presses,  
 stone-processing ma-  
 chinery  
 HOW PUBLISHED Daily newspapers, weekly periodical  
 WHERE PUBLISHED USSR  
 DATE PUBLISHED 3 Apr - 31 May 1953  
 LANGUAGE Russian

DATE OF INFORMATION 1953  
 DATE DIST. 17 Aug 1953  
 NO. OF PAGES 3  
 SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE  
 OF THE UNITED STATES. WITHIN THE MEANING OF TITLE 18, SECTIONS 793  
 AND 794, OF THE U.S. CODE, AS AMENDED, ITS TRANSMISSION OR REVE-  
 LATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS  
 PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers and periodical as indicated.

NEW ASSIGNMENTS AND DEVELOPMENTS IN USSR MACHINE BUILDING

MACHINE-TOOL PLANT WILL PRODUCE PRESSES IN 1953 -- Moscow, Pravda, 23 May 53

In recent years, the Kolomna Heavy Machine Tool Building Plant has mastered the production of 19 types of machines. Series production of ten types of heavy machine tools has been organized in the shops. Among them are gear hobbing machines, the largest of which can machine gears up to 5 meters in diameter; vertical boring mills for machining parts up to 2.5, 3.2, and 5 meters in diameter; and horizontal gear hobbing machines.

The Kolomna Plant began its production with the manufacture of machines only 10 tons in weight. It now produces machines more than 500 tons in weight. In the near future, it must master the production of even heavier machines. In particular, in the current Five-Year Plan, it must produce vertical boring mills 16-22 meters in diameter and 1,400 tons in weight.

The production cycle and labor consumption in the manufacture of machines at the plant have been decreased regularly. For example, during the past 2 years, the production cycle for series-produced vertical boring mills has been decreased by 40 percent. More work in this direction still remains to be done, however, especially by the design bureaus.

In developing a machine-tool design, the designers should keep in mind the possibility of decreasing the weight of the machine and unifying its parts. Unfortunately, they do not always adhere to this rule. In many cases they strive for originality in design, thus complicating it unnecessarily, and they introduce changes which have not been tested under experimental conditions. This has been detrimental to production, and the manufacture of machines has been delayed. For example, more than a year ago, a hydraulic slotter and hydraulic shaper were built at the plant; however, they have not yet been completely adjusted. Defects allowed in the designing stage are still being corrected. Continuous revisions are creating excessive expenditures. As a result, the hydraulic slotter has cost the plant twice as much as planned.

- 1 -

CLASSIFICATION		CONFIDENTIAL	
STATE	<input checked="" type="checkbox"/> NAVY	<input checked="" type="checkbox"/> NSRB	DISTRIBUTION
ARMY	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> FBI	

CONFIDENTIAL

50X1-HUM

The creation of a machine-tool research laboratory at the plant to improve the designs of heavy machine tools would be of great help to designers and technologists. The Experimental Scientific Research Institute of Metal-Cutting Machine Tools is of no assistance in this respect because it concentrates primarily on the technical development of machine tools of smaller dimensions. It is time for this educational institute as well as the Institute of Machine Studies of the Academy of Sciences USSR, and the Machine Tool and Tool Institute to participate in the development of heavy machine tool building.

The production cycle at the plant could be shortened if such operations as manual transporting of parts were mechanized. In planning a technological process, technologists should concentrate their attention on maximum mechanization of labor-consuming operations.

The planning of production by Glavtyazhstankopress /Main Administration of Heavy Machine Tool and Press Building?/ can also be improved. Sometimes the plant receives orders which have no relationship to heavy and unique machine-tool building.

In addition to producing machine tools, the Kolonna Plant has been assigned the task of preparing and developing the production of heavy presses in 1953. In solving this new and complex problem, the plant must have the assistance of Glavtyazhstankopress and a number of administrations of the Ministry of Machine Building. These organizations must in the very near future furnish the plant with necessary equipment and materials, select engineering and technical workers, and assure the allocation on schedule of capital needed for the development of press production. -- M. Nosovskiy, director, Kolonna Heavy Machine Tool Building Plant.

MOTOR REPAIR PLANT ORDERED TO PUT OUT NEW PRODUCT -- Vil'nyus, Sovetskaya Litva, 21 Apr 53

The Kaunas Motor Repair Plant has received an assignment to set up production of universal drilling machines. A great deal of preparatory work has been done in perfecting the new product.

Plant personnel have pledged to release the first model of the machine tool by 1 May.

MASTER PRODUCTION OF NEW TYPE MACHINE TOOLS -- Tbilisi, Zarya Vostoka, 3 Apr 53

In 1953, the Kiev Machine Tool Building Plant imeni Gor'kiy has mastered the series production of four new multispindle machine tools, and is now manufacturing 16 types of various unit-type machine tools.

NEW MULTITool AUTOMATIC LATHE -- Baku, Bakinskiy Rabochiy, 14 Apr 53

A new multitool automatic lathe, developed by designers of the Experimental Scientific Research Institute of Metal-Cutting Machine Tools, performs more than ten operations simultaneously.

With multitool machining, a part can now be manufactured in 5-10 minutes instead of an hour.

The automatic machine tool is universal. The tooling of the new lathe for machining various types of parts is done four times as fast as formerly.

- 2 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

DESIGN PRECISION GRINDING MACHINE -- Moscow, Moskovskaya Pravda, 20 May 53

The smallest grinding machine in the USSR has been designed at the Experimental Scientific Research Institute of Metal Cutting Machine Tools. The machine will grind parts to an accuracy of 1-2 microns.

It weighs only 290 kilograms, which is 10-15 times less than average machine tools of this type. Parts one millimeter or more in diameter can be machined on it. Internal surfaces of parts of various shapes as well as external surfaces can be machined.

The new machine tool is exceptional for its convenience in servicing and high productivity. The basic operating processes are automatic. The grinding speed is 1.5 times as high as ordinary speeds.

MACHINE TOOL PLANT MAKES TUFF-QUARRYING MACHINE -- Yerevan, Kommunist, 8 Apr 53

The Yerevan Machine Tool Building Plant imeni Dzerzhinskiy has manufactured an experimental model of a new tuff-quarrying machine of A. M. Stolyarov's system.

RECEIVE AWARDS FOR NEW STONE-PROCESSING MACHINES -- Kishinev, Sovetskaya Moldaviya, 29 Apr 53

Konstantin Petrovich Galanin and Aleksandr Ivanovich Klimenko have been awarded Certificates of Honor by a 28 April 1953 ukase of the Presidium of the Supreme Soviet, Moldavian SSR, for inventing a stone-cutting machine and machines for processing coquina.

Sixteen other persons have received the same distinction for active participation in the development, manufacture, and introduction into production of stone-cutting machines. [Names of award winners are available in source.]

AUTOMATIC PLANT FOR BEARINGS BEING DEVELOPED -- Moscow, Ogonek, 31 May 53

An automatic plant is being developed in the Soviet Union for the production of ball and roller bearings.

- E N D -

- 3 -

CONFIDENTIAL